

Yorkshire Philosophical Society.

ANNUAL REPORT

FOR

MDCCCXCIX.



ANNUAL REPORT
OF THE COUNCIL
OF THE
YORKSHIRE
PHILOSOPHICAL SOCIETY

FOR
MDCCCXCIX.



PRESENTED TO THE ANNUAL MEETING,

FEBRUARY 12th, 1900.

YORK :
COULTAS & VOLANS, PRINTERS, KING STREET,
1900.

TRUSTEES
OF
THE YORKSHIRE MUSEUM.
APPOINTED BY ROYAL GRANT.

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WILLIAM LAWTON.

T. S. NOBLE.

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OF THE
Yorkshire Philosophical Society.

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(For one year in place of the Rev. W. Haworth).

HON. SECRETARIES.

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C. E. ELMHIRST.

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| | | |
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| GEOLOGY | - - - - - | J. F. WALKER, M.A., F.G.S. |
| MINERALOGY | - - - - - | W. H. HUDLESTON, M.A., F.R.S. |
| COMPARATIVE ANATOMY | - - | T. ANDERSON, M.D., B.Sc. |
| ORNITHOLOGY | - - - - - | J. BACKHOUSE, F.Z.S., M.B.O.U. |
| BOTANY | - - - - - | H. J. WILKINSON. |
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| METEOROLOGY | - - - - - | THE REV. W. JOHNSON, B.A. |
| LABORATORY | - - - - - | J. F. WALKER, M.A., F.I.C., F.C.S., London and Berlin. |
| LIBRARY | - - - - - | A. BUCKLE, B.A. |

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KEEPER OF THE MUSEUM.

HENRY MAURICE PLATNAUER, A.R.S.M., B.Sc.

REPORT OF THE COUNCIL
OF THE
YORKSHIRE PHILOSOPHICAL SOCIETY,
FEBRUARY 12TH, 1900.

The year 1899, though uneventful, has been on the whole one of prosperity to the Society. The number of members has somewhat increased, the losses by death and resignation being more than balanced by thirty-five accessions. The income has been £1,262, as against £1,190 for the previous year, but this includes special donations amounting to £28 10s. towards cost of a new anemometer.

The expenses—£1,275—exceed the income by £13, but there is still a substantial balance of £150 in the hands of the Treasurer after paying all known liabilities. The Council hope to keep this balance in hand for the present as a nest-egg for several much needed improvements in the Museum, which they do not feel justified in undertaking at present. The causes of increased expenditure,—several of them exceptional, (and but for which the balance would have been on the right side),—are :

- (1) Drainage of St. Mary's Lodge and the Baths—£52.
- (2) New Locks and Keys—£20.
- (3) Bronze Tablet for the Queen Margaret's Archway—£15.
- (4) Payment to Meteorological Observer, formerly paid by Meteorological Office—£12.
- (5) Anemometer, £40—less £28 10s. raised by special subscription—£11 10s.*

* The greater part of this deficit has already been subscribed, and it is hoped that some further donations may yet be received.

With regard to these special items it may be remarked—

(1) The Drainage.—The alterations were ordered by the local sanitary authorities, and the Society had no option in the matter.

(2) A good many keys have been lost by members during the last few years, and it is known that in several cases the keys thus lost have passed into the hands of unauthorized persons. In order, therefore, to better secure the due privacy and safe custody of the premises, the Council resolved to change the locks and keys of the Gardens. A circular was sent out with the announcement of this change, requesting members to keep the new keys in safe custody, or to entrust them to none but responsible members of their households. The Council desire to call special attention to this request and to beg that it may be carefully observed. The new keys are much more portable than the old ones, and are small enough to be carried on a bunch with others.

(3) The Meteorological Office formerly paid an annual gratuity to the observer who forwarded daily by telegraph the reports of the weather which appeared in the newspapers. It seems that the meteorological office receives a fixed annual grant from Parliament, the details of the disposal of which are left in the hands of the officials. Owing to certain clerks having retired on pensions, the amount available for general current expenses is diminished, and the daily telegraphic reports from certain stations are discontinued. The department is anxious to have the same observations taken as formerly and the results supplied to it at intervals, but at the expense of local people. Unfortunately the subject is not sufficiently political to make a parliamentary question likely to be of use.

(4) The Anemometer, or self-recording wind gauge, is of a new and improved pattern, and registers on a band of paper from moment to moment, the force of the wind. Those interested will be able on any windy day to see each gust of wind recording itself. The Council is much indebted to G. Crawhall, Esq., for the interest he has taken in the matter and for his liberality and energy in obtaining subscriptions.

The following Lectures have been delivered in the Museum during the year :—

Thursday, January 19th.—“Eclipses of the Sun” (with Lantern Illustrations, including some Photographs taken by the Lecturer on January 22nd, 1898, while in India with Sir J. Norman Lockyer, K.C.B., F.R.S., &c.). By A. Fowler, A.R.C.S., F.R.A.S.

Thursday, February 2nd.—“Vesuvius and its late Eruption” (illustrated by Lantern Pictures from Photographs taken by the Lecturer). By Tempest Anderson, M.D., B.Sc.

Thursday, February 16th.—“The Great Sahara” (with Lantern Illustrations from Photographs taken by the Lecturer). By H. Bendelack Hewetson, F.L.S., F.Z.S., F.R.G.S.

Thursday, March 2nd.—“Joan of Arc.” By Mrs. Fawcett.

Thursday, March 16th.—“London Traffic and the New Deep Level Railways” (Illustrated by Lantern Pictures from Photographs taken by the Lecturer). By W. C. Copperthwaite, A.M.I.C.E.

Thursday, April 13th.—“Episodes of an American Tour” (Illustrated by Lantern Pictures from Photographs taken by the Lecturer). By Malcolm Spence.

Thursday, October 12th.—“A Visit to Southern Mexico” (Illustrated by Lantern Pictures). By John W. Rowntree.

Thursday, October 26th.—“The Roman Wall in Northumberland” (Illustrated by Lantern Pictures). By Thos. Hodgkin, D.C.L.

Friday, November 10th.—“West Africa” (Illustrated by Lantern Pictures). By Miss Mary Kingsley.

Thursday, November 23rd.—“Old Yorkshire Customs and Home Industries” (Illustrated by Antique Objects). By W. Horne, F.G.S.

Thursday, December 7th.—“Splashes studied by Instantaneous Photography” (Illustrated by Lantern Pictures). By R. S. Cole, M.A.

Thursday, December 21st.—“Climbing in the Rocky Mountains” (Illustrated by Lantern Pictures). By Harold B. Dixon, F.R.S., &c.

The Council again desire to place on record grateful acknowledgments to the lecturers who have most generously given their services, besides in many cases putting themselves to the inconvenience of a long railway journey; and also to those who have read papers at the monthly meetings.

It will be gratifying to the members of this Society to learn that the Museum premises have on several occasions been used by other associations working for the advancement of knowledge. The York Medical Society has on two occasions held well attended meetings in our lecture theatre; the York University Extension Society has given three courses of lectures here, and the York and District Field Naturalists' Club continues to hold its monthly meetings and to lodge its library and collections in this Museum.

In August last the Museum Gardens were again visited by the Benson Shakespearian Co., and a charming performance of “As you like it” was given in the open air. Special terms were obtained for admitting members free, and the Council have reason to think that the entertainment was appreciated.

An entirely new departure was made by the Council during the past summer in the form of a Garden Party—and it must have been a revelation to many of the members to find that the Gardens were so admirably adapted for the purpose. A Band played in front of the Museum; games of various kinds were provided, and tea and light refreshment were supplied. Sir Charles Strickland, the President of the Society, attended with some members of his family, and rendered every assistance in receiving and entertaining the guests. It is perhaps as well to note that the expense did not in any way come out of the funds of the Society, but was privately subscribed by the members of the Council.

Of our losses by death we would specially mention that of Major J. A. Barstow, who was killed by a bicycle accident whilst riding from Malton to York. Major Barstow was not only a Vice-President of the Society, but had for many years

been a hard working and generous member of the Council, always ready to preside at our gatherings, and assist with practical advice in the management of the Garden and Buildings; he had also enriched the collections by numerous valuable donations.

An interesting and extremely artistic Tablet has been placed upon Queen Margaret's Gateway at the Exhibition end of Bootham, and your Committee desire to express the thanks of the Society to Mr. Brierley, who designed the Tablet, and to Messrs. Longden & Co., of Sheffield, who modelled and cast it without making any charge beyond the actual money out of pocket.

The Council are very desirous that similar Tablets should be placed upon each of the Bars, and every other building of historical interest, giving a short epitome of the distinctive historical events with which they are associated. It can hardly be expected that this Society should bear the expense, which is considerable, but they would be willing to co-operate with the Corporation in preparing the inscription, if the city authorities would bear the cost of making and fixing Tablets.

The Council would again appeal to the owners of property adjoining the Bar Walls in Bootham and Marygate to evince a public spirit by allowing such houses, many of which are far from sanitary, to be gradually removed, and the Wall exposed to the road. If owners are not prepared to make the present sacrifice in the rents, the Council would venture to suggest that a devise to the Philosophical Society or the York Corporation for the purpose of removal would meet the case.

The Council recommends the Rev. W. Haworth as Vice-President in the place of Major J. A. Barstow deceased, and Mr. W. H. Brierley, the Rev. E. S. Carter, and Messrs. W. H. Cobb, J. W. Cudworth, and Herbert Leetham as members of Council, in the place of the Rev. W. Haworth and of Sir C. A. Milward, Messrs. E. R. Dodsworth, J. Backhouse, and Geo. Wilson, who retire by rotation.

ARCHÆOLOGY.—Numerous additions have been made to the collections during the year, chiefly from the excavations in Davygate and S. Sampson's Square. The objects discovered in these excavations, though they did not in some respects come up to expectation, included two remarkably fine green-glazed jugs. One of these—a large and perfect specimen—was secured for the Museum through the kindness of James Melrose, Esq.

So rapidly do our antiquities accumulate that their accommodation threatens to become a serious problem. The Hon. Curator is glad to report that through the generosity of Mr. Backhouse alterations have been made in the basement of the Museum that will give a largely increased amount of storage for stone and pottery. But our collections are sadly cramped by want of space, and the question of extension merits the serious attention of the Society.

It may also be mentioned that two Norman Gotches, formerly belonging to the Mayhew Collection, have been secured by purchase. Up to the time of this acquisition we possessed no pottery that could with certainty be regarded as Norman.

GEOLOGY.—The Honorary Curator of Geology reports that few additions have been made to the collection during the past year. Coal measure fossils from Normanton have been presented by A. F. Brown, Esq., and some Lias fossils from the Drift at Lilling, including a very fine specimen of Ammonite, by J. Smith, Esq.

Specimens for description have been sent to H. Woods and Wheelton Hind. The Yorkshire specimens of Permian fossils have been re-labelled. The income from the Reed Fund has been spent in binding books.

LIBRARY.—The additions to our Library are steadily and continuously coming in, but the re-arrangement made in 1897 enables the Librarian to cope with them. The magnificent publications of the United States Government are, however, arriving in such numbers that it is doubtful whether the space intended for a ten years' extension of these books will last for more than three years.

The Librarian has much pleasure in reporting that the Catalogue of the Library is finished and in the press. In the course of a few weeks the Society will at length possess a printed catalogue of its books. The Librarian desires once more to express his thanks to Mr. George Wilson for the help he has given in preparing the catalogue.

COMPARATIVE ANATOMY.—The collections in this department are in good order. No additions of any importance have been made except two fine Reindeer Skulls (male) from Norway, presented by Mr. George Hooper.

PHOTOGRAPHIC SECTION.—The interest in this section has been well sustained during the year, and a fair increase in the membership has taken place, while there is promise of yet more. During the past year the meetings have certainly benefited considerably so far as attractiveness is concerned by the amalgamation of the Section with the Affiliation of Photographic Societies. From this Organization, which embraces upwards of eighty photographic societies, prints, lantern slides, or even technical papers may be borrowed for inspection or discussion at the Section's meetings.

The usual exhibition of Lantern Slides by a few members of the Section took place in the spring, open to all members of the Yorkshire Philosophical Society, and apparently gave the usual satisfaction. The income of the Section continues to be sufficient for its moderate expenses.

BOTANY.—The specimens of flowering plants which have been arranged during the year (1899) will be found enumerated on pp. 11-24. The most important additions to this department consists of two specimens from F. H. Weekes, Esq., York, viz. :—

| | |
|-----------------------------------|--------------------------|
| <i>Rubus chamæmorus</i> , Linn. | } Morrone Hill, Braemar. |
| <i>Linnaea corallis</i> , Gronov. | |

MINERALOGY.—The collections in this department are in good order, and seem to be appreciated by visitors. But no additions have been made to them during the past year, nor are there any alterations to report during that period.

ORNITHOLOGY.—The collection of British Birds is being added to year by year, but many gaps remain. Many of the specimens obtained during 1899 have been cased and put into the Gallery. The Honorary Curator is making a full catalogue of the British Birds in the Museum, giving history and reference where these are known. The first instalment of this catalogue will be found on pp. 1—9 of this Report. Another very useful work undertaken by the Honorary Curator, in conjunction with Mr. Oxley Grabham, is the division of the foreign birds into geographical groups. It is hoped that in a short time a series will be exhibited illustrating Dr. Sclater's well known division of the earth into provinces.

METEOROLOGY.—1899 must be reckoned on the whole a good year.

Temperature was marked by a greater range than in 1898, the spring months having a lower, and the summer months a much higher temperature, the annual mean temperature being 48·9 as against 49·5. The fine weather during June, July, August, rapidly ripened the various crops, though the yield was probably disappointing owing to deficient rainfall. The lowest temperature was recorded on December 16th, when 14° F. was registered, and the highest on August 25th when 86·0° F. was the reading. The maximum temperatures of June, July, August, and September were 81°, 83°, 86°, 80°. The temperature of the later months of the year was much lower than for 1898.

A *Mean Pressure* of 29·949 has been recorded, as against 29·945 for 1898, January and April being lowest with 29·748 and 29·765 respectively, and August highest with 30·104. The extreme range of pressure is 2·385 inches as against 1·782 for 1898.

Owing to an accident to the Sunshine Recorder caused by a severe gale, the records of *Bright Sunshine* have not been continued between March and December. The instrument has however been repaired and replaced, and the observations have been resumed. For the first three months there was a decided fall-off in the hours observed.

Rain or Snow fell on 182 days in 1899, 8 above the average. The total fall of 22·400 being again less (by 1·330 inches)

than that of the previous year. The heaviest fall was on the 11th of May, when 1·200 inches fell. Thunder was heard on 12 days, as compared with 10 in '98 and 7 in '97. May was the wettest month of the year with a fall of 3·68 inches, whilst August, usually our wettest month, produced only ·91 inches, and thus was the driest month of the year. The cumulative totals since 1841 now amount to:—August 159·32 inches, October 157·73 inches, and July 153·68 inches.

The height of the Ouse, as registered by the automatic recorder at the Guildhall, York, appears to have been highest in 1899 on January 22nd, on which day at 5 p.m. the river was 12ft. 8in. above summer level. There was considerable flood-water in the river during the middle of February, and again in April and May. During the four months, June-September, however, was very low, being below summer level practically from June 26th to September 16th. Much water came down the river during the early days of November, but during the latter half of that month and nearly to the end of December the river was little above summer level. It might be interesting to trace a connection between the height of the river and the general health of the city. During the previous year the highest level was 9ft. 9in. (Oct. 19th).

In 1899 two gifts of some interest and utility have been made to the Meteorological department of the Museum. Mr. R. Thompson has presented a self-registering Barograph, the sinuous curves of which are faithful records of barometric readings, which would otherwise be lost. And by the co-operation of Mr. George Crawhall and Mr. R. Thompson sufficient funds have been collected to erect upon the Museum a self-registering Anemometer. It is much to be regretted that this increase of local interest in meteorological observations should coincide with the loss of the grant from the Meteorological Office.

OBSERVATORY.—The thanks of the Society are due to Mr. Scott, who has spent a considerable amount of time and trouble on the equatorial and transit telescopes and has brought both instruments into a satisfactory working condition. Steps will shortly be taken to warm the Observatory so as to counteract the effects of damp.

STATION, YORK.—THE MUSEUM.

Longitude 1° 5' W., Latitude 53° 57' N. Height above Mean Sea Level 56 ft. Gravity Correction + .024 in.

| 1899. | Mean Pressure at 32° Fahrenheit at M. S. Level | Air Temperature. | | | | | | Humidity. | | | | | |
|-------|--|------------------|-------|-------|------------------------|------|------|--------------------|--------|-------|--------------------|--------|-------|
| | | Means of | | | Absolute Min. and Max. | | | Depm. of Wet Bulb. | | | Tension of Vapour. | | |
| | | 9 a.m. | 9 pm. | Mean. | Min. | Day. | Max. | 9 a.m. | 9 p.m. | Mean. | 9 a.m. | 9 p.m. | Mean. |
| | | ° | ° | ° | ° | Day. | ° | ° | ° | in. | ° | ° | % |
| Jan. | 29.748 | 38.8 | 39.9 | 39.4 | 35.2 | 44.9 | 22.0 | 26th | 54.4 | 21st | 21.7 | 22.0 | 21.9 |
| Feb. | 29.858 | 39.1 | 40.5 | 39.8 | 34.1 | 46.5 | 22.0 | 28th | 59.1 | 10th | 20.9 | 22.2 | 21.6 |
| Mar. | 30.021 | 41.1 | 40.6 | 40.9 | 34.3 | 49.4 | 22.0 | 21, 24 | 60.0 | 13th | 21.3 | 21.7 | 21.5 |
| April | 29.765 | 47.1 | 44.3 | 45.7 | 39.5 | 52.5 | 29.4 | 18th | 61.0 | 28th | 25.2 | 24.3 | 24.8 |
| May | 30.018 | 50.7 | 47.5 | 49.1 | 40.9 | 56.8 | 30.8 | 5th | 71.0 | 31st | 27.3 | 26.8 | 27.1 |
| June | .070 | 61.4 | 57.8 | 59.6 | 49.7 | 70.5 | 41.8 | 14, 15 | 81.0 | 6th | 35.6 | 36.7 | 36.2 |
| July | .051 | 64.6 | 61.6 | 63.1 | 55.1 | 72.5 | 49.0 | 17th | 83.0 | 12th | 43.1 | 42.9 | 43.0 |
| Aug. | 30.104 | 63.8 | 60.6 | 62.2 | 53.5 | 72.7 | 46.0 | 11th | 86.0 | 1, 25 | 42.8 | 42.8 | 42.8 |
| Sept. | 29.774 | 56.3 | 54.4 | 55.4 | 47.7 | 63.2 | 36.0 | 29th | 80.0 | 5th | 33.8 | 35.9 | 34.4 |
| Oct. | 30.028 | 46.2 | 47.9 | 47.1 | 40.6 | 55.5 | 30.0 | 20th | 64.0 | 17th | 27.5 | 29.9 | 28.7 |
| Nov. | 30.081 | 46.6 | 46.5 | 47.6 | 41.0 | 52.7 | 25.0 | 17, 18 | 63.0 | 2, 4 | 26.8 | 26.5 | 26.7 |
| Dec. | 29.873 | 35.3 | 34.8 | 35.1 | 30.5 | 40.1 | 14.0 | 16th | 53.0 | 4th | 19.2 | 19.0 | 19.1 |
| Year | 29.949 | 49.3 | 48.0 | 48.7 | 41.8 | 56.5 | — | — | — | — | 28.8 | 29.2 | 29.0 |
| | | | | | | | 3.3 | 2.4 | 2.9 | | 79.4 | 83.6 | 81.5 |

STATION, YORK.—THE MUSEUM.

Heights above Ground :—Barometer, 3 feet ; Thermometers, 4 feet ; Rain-gauge, 1 foot.

| 1899. | Amount of Cloud. | | | Rainfall. | | | Weather, No. of Days of | | | | | | Wind, No. of Observations of | | | | | | | | | |
|-------|------------------|--------|------|--------------|-------------|------|-------------------------|-------|-------|---------------|------------|------------|------------------------------|-----|------|----|------|-----|------|-----|------|-------|
| | 9 a.m. | 9 p.m. | Mean | Total. | Max. | Day. | Rain. | Snow. | Hail. | Thunder Storm | Clear Sky. | Over-cast. | Gale. | N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | Calm. |
| | | | | | | | | | | | | | | | | | | | | | | |
| Jan. | 6.7 | 6.6 | 6.7 | ins. 2.21 | ins. .33 | 11th | 23 | 4 | 0 | 0 | 3 | 13 | 1 | 13 | 3 | 3 | 6 | 16 | 7 | 10 | 4 | 0 |
| Feb. | 5.2 | 5.6 | 5.4 | 1.14 | .33 | 7th | 11 | 4 | 0 | 0 | 6 | 7 | 0 | 6 | 1 | 13 | 4 | 22 | 5 | 2 | 2 | 1 |
| Mar. | 5.9 | 4.9 | 5.4 | 1.17 | .29 | 30th | 18 | 8 | 1 | 0 | 5 | 6 | 1 | 13 | 1 | 1 | 2 | 13 | 5 | 19 | 5 | 3 |
| April | 7.2 | 6.6 | 6.9 | 2.05 | .32 | 6th | 21 | 1 | 0 | 1 | 2 | 12 | 2 | 15 | 3 | 3 | 3 | 11 | 5 | 14 | 6 | 0 |
| May | 6.4 | 5.8 | 6.1 | 3.68 | 1.20 | 11th | 16 | 0 | 0 | 2 | 4 | 13 | 0 | 16 | 9 | 10 | 4 | 7 | 4 | 6 | 6 | 0 |
| June | 5.4 | 5.0 | 5.2 | 1.46 | .36 | 20th | 9 | 0 | 0 | 3 | 9 | 10 | 0 | 14 | 5 | 14 | 5 | 5 | 0 | 12 | 5 | 0 |
| July | 5.5 | 5.2 | 5.4 | 1.31 | .59 | 3rd | 12 | 0 | 0 | 3 | 5 | 7 | 0 | 6 | 6 | 5 | 2 | 7 | 4 | 26 | 5 | 1 |
| Aug. | 4.6 | 3.8 | 4.2 | 0.91 | .22 | 29th | 12 | 0 | 0 | 2 | 8 | 3 | 0 | 5 | 11 | 16 | 5 | 7 | 2 | 12 | 4 | 0 |
| Sept. | 4.8 | 4.6 | 4.7 | 2.48 | .84 | 21st | 17 | 0 | 1 | 1 | 4 | 2 | 3 | 3 | 0 | 4 | 3 | 11 | 9 | 23 | 7 | 0 |
| Oct. | 6.4 | 5.7 | 6.1 | 2.15 | .82 | 1st | 14 | 0 | 0 | 0 | 2 | 10 | 1 | 6 | 1 | 4 | 7 | 15 | 6 | 13 | 8 | 2 |
| Nov. | 6.2 | 6.1 | 6.2 | 1.00 | .26 | 7th | 11 | 0 | 0 | 0 | 2 | 8 | 2 | 4 | 0 | 2 | 6 | 14 | 11 | 19 | 2 | 2 |
| Dec. | 6.7 | 6.4 | 6.6 | 2.84 | .57 | 28th | 18 | 6 | 0 | 0 | 4 | 13 | 0 | 13 | 6 | 6 | 4 | 13 | 4 | 7 | 7 | 2 |
| Year | 5.9 | 5.5 | 5.7 | 22.40 | — | — | 182 | 23 | 2 | 12 | 54 | 104 | 10 | 114 | 46 | 81 | 51 | 141 | 62 | 163 | 61 | 11 |

RIVER HEIGHT RECORDS REGISTERED BY THE AUTOMATIC RECORDER
AT THE GUILDHALL, YORK, 1899.

| Date. | JANUARY. | | FEBRUARY. | | MARCH. | | APRIL. | | MAY. | | JUNE. | |
|-------|----------|--------------------------------|-----------|--------------------------------|--------|--------------------------------|---------|--------------------------------|-----------|--------------------------------|-----------|--------------------------------|
| | Time. | Above or below S.L. ft. in. | Time. | Above or below S.L. ft. in. | Time. | Above or below S.L. ft. in. | Time. | Above or below S.L. ft. in. | Time. | Above or below S.L. ft. in. | Time. | Above or below S.L. ft. in. |
| 1 | 1 a.m. | 3 4 | noon | 2 10 | noon | 1 7 | 6 p.m. | 2 6 | 9 a.m. | 0 11 | 9 a.m. | 0 5 |
| 2 | noon | 3 0 | " | 2 9 | " | 1 7 | 1 a.m. | 2 0 | " | 1 6 | " | 0 6 |
| 3 | " | 3 1 | " | 2 8 | " | 1 6 | 12 p.m. | 1 2 | " | 0 10 | " | 0 5 |
| 4 | 12 p.m. | 3 8 | " | 2 7 | " | 1 6 | noon | 1 2 | " | 1 2 | Not taken | (Sunday) |
| 5 | 4 p.m. | 8 1 | " | 2 6 | " | 1 5 | " | 1 3 | " | 0 10 | 9 a.m. | 0 5 |
| 6 | 1 a.m. | 6 10 | " | 2 6 | " | 1 4 | 11 p.m. | 2 7 | " | 0 6 | noon | 0 4 |
| 7 | 12 p.m. | 2 8 | " | 2 5 | " | 1 4 | 12 p.m. | 3 5 | " | 0 5 | " | 0 4 |
| 8 | 11 a.m. | 2 10 | " | 4 6 | " | 1 4 | 1 a.m. | 3 5 | " | 0 4 | " | 0 3 |
| 9 | noon | 2 6 | " | 7 6 | " | 1 4 | " | 2 11 | " | 0 5 | " | 0 3 |
| 10 | 1 a.m. | 2 6 | 3 p.m. | 8 10 | " | 1 4 | 12 p.m. | 1 2 | " | 0 4 | " | 0 3 |
| 11 | 5 p.m. | 3 9 | 1 a.m. | 8 5 | " | 1 4 | 6 p.m. | 1 8 | " | 0 4 | " | 0 3 |
| 12 | 12 p.m. | 3 6 | noon | 6 3 | " | 1 5 | 1 a.m. | 1 8 | " | 4 8 | " | 0 2 |
| 13 | 3 p.m. | 8 9 | 1 a.m. | 4 2 | " | 1 3 | noon | 1 3 | " | 6 9 | " | 0 2 |
| 14 | 1 a.m. | 8 2 | noon | 6 6 | " | 1 3 | 12 p.m. | 1 6 | Not taken | (Sunday) | " | 0 2 |
| 15 | " | 3 11 | 4 a.m. | 7 3 | " | 1 3 | " | 3 5 | 9 a.m. | 3 5 | " | 0 1 |
| 16 | 12 p.m. | 8 0 | 1 a.m. | 4 2 | " | 1 3 | noon | 5 9 | 5 p.m. | 5 0 | " | 0 1 |
| 17 | 4 a.m. | 8 4 | " | 3 2 | " | 1 3 | 1 a.m. | 3 10 | 9 a.m. | 3 9 | " | 0 1 |
| 18 | 1 a.m. | 6 3 | " | 2 9 | " | 1 2 | " | 3 0 | 5 p.m. | 2 0 | " | 0 2 |
| 19 | 12 p.m. | 9 11 | noon | 2 6 | " | 1 2 | 1 a.m. | 2 6 | 9 a.m. | 1 4 | " | 0 2 |
| 20 | 3 p.m. | 12 2 | 1 a.m. | 2 5 | " | 1 1 | " | 2 2 | 1 p.m. | 2 10 | " | 0 1 |
| 21 | 1 a.m. | 11 8 | noon | 2 2 | " | 1 1 | noon | 1 8 | Not taken | (Sunday) | " | 0 4 |
| 22 | 5 p.m. | 12 8 | " | 2 1 | " | 1 1 | " | 1 6 | Not taken | (Bk H'day) | " | 0 4 |
| 23 | 1 a.m. | 12 6 | " | 1 11 | " | 1 0 | " | 1 5 | 9 a.m. | 1 6 | " | 0 3 |
| 24 | " | 11 3 | " | 1 10 | " | 1 0 | " | 1 4 | 5 p.m. | 4 6 | " | 0 1 |
| 25 | " | 8 0 | " | 1 9 | " | 1 0 | " | 1 6 | 9 a.m. | 3 5 | " | 0 1 |
| 26 | " | 4 3 | " | 1 8 | " | 1 0 | " | 1 6 | " | 1 8 | " | below 0 |
| 27 | " | 3 6 | " | 1 7 | 6 p.m. | 2 1 | " | 1 6 | " | 1 4 | " | 0 1 |
| 28 | " | 3 3 | " | 1 7 | noon | 1 11 | " | 1 6 | Not taken | (Sunday) | " | 0 1 |
| 29 | " | 3 0 | noon | 3 8 | noon | 3 8 | " | 1 5 | 9 a.m. | 0 7 | " | S.L. |
| 30 | noon | 2 10 | 1 a.m. | 3 2 | " | 3 2 | 12 p.m. | 2 4 | " | 0 3 | " | above 0 |
| 31 | " | 2 10 | " | 2 1 | " | 2 1 | " | " | 5 p.m. | 0 6 | " | 2 |

RIVER HEIGHT RECORDS.—Continued.

| Date. | JULY. | | AUGUST. | | SEPTEMBER. | | OCTOBER. | | NOVEMBER. | | DECEMBER. | |
|-------|---------|---------------------------|---------|---------------------------|-----------------|---------------------------|----------------|---------------------------|-----------------|---------------------------|----------------|---------------------------|
| | Time. | Above or below S.L. | Time. | Above or below S.L. | Time. | Above or below S.L. | Time. | Above or below S.L. | Time. | Above or below S.L. | Time. | Above or below S.L. |
| 1 | noon | ft. in. 0 2 | noon | below 0 | ft. in. S.L. | 6 a.m. | ft. in. 6 4 | 9 a.m. | ft. in. 0 10 | noon | ft. in. 0 3 | |
| 2 | " | 0 2 | " | 0 | above 0 | 11 p.m. | 8 2 | " | 0 6 | 12 p.m. | 0 9 | |
| 3 | 3 p.m. | 0 8 | " | 0 | 0 11 | 1 a.m. | 8 0 | 8 p.m. | 1 6 | 1 a.m. | 0 9 | |
| 4 | 11 a.m. | S.L. | " | 0 | 0 8 | 5 p.m. | 7 2 | 1 p.m. | 4 3 | " | 0 6 | |
| 5 | 6 p.m. | 0 3 | " | 0 | 0 2 | 3 p.m. | 1 5 | Not taken | (Sunday) | 3 p.m. | 0 11 | |
| 6 | 1 a.m. | 0 3 | " | 0 | S.L. | " | 1 3 | 9 p.m. | 2 6 | 12 p.m. | 2 1 | |
| 7 | noon | 0 3 | " | 0 | S.L. | 1 a.m. | 1 2 | 1 a.m. | 1 0 | " | 2 10 | |
| 8 | " | 0 2 | " | 0 | S.L. | 12 p.m. | 0 10 | 12 p.m. | 3 0 | " | 1 4 | |
| 9 | " | below 0 | " | 0 | S.L. | 1 a.m. | 0 10 | 3 p.m. | 4 8 | 11 a.m. | 0 6 | |
| 10 | " | 0 4 | " | 0 | below 0 | noon | 0 5 | 1 a.m. | 3 9 | 1 a.m. | 1 2 | |
| 11 | " | 0 6 | " | 0 | 0 3 | 1 a.m. | 0 8 | 12 p.m. | 4 0 | " | 0 9 | |
| 12 | " | 0 6 | " | 0 | 0 4 | noon | 0 8 | 7 a.m. | 5 8 | noon | 0 8 | |
| 13 | 2 p.m. | 0 4 | " | 0 | 0 3 | 10 p.m. | 1 9 | 1 a.m. | 4 0 | " | 0 6 | |
| 14 | 1 a.m. | above 2 | " | 0 | 0 3 | 9 a.m. | 1 6 | noon | 1 3 | " | 0 5 | |
| 15 | noon | below 0 | " | 0 | 0 2 | 1 a.m. | 0 11 | 1 a.m. | 1 2 | 1 a.m. | 0 5 | |
| 16 | " | 0 2 | " | 0 | 0 3 | " | 0 8 | 10 p.m. | 0 10 | " | 0 2 | |
| 17 | " | 0 5 | " | 0 | 0 2 | 8 p.m. | 0 6 | 1 a.m. | 0 10 | 12 p.m. | 0 6 | |
| 18 | " | 0 6 | " | 1 | above 0 | 1 a.m. | 0 5 | 9 a.m. | 0 6 | 1 a.m. | 0 6 | |
| 19 | " | 0 4 | " | 1 | S.L. | " | 0 3 | Not taken | (Sunday) | noon | 0 3 | |
| 20 | " | 0 4 | " | 0 | above 1 | 12 p.m. | 0 2 | 12 p.m. | 0 7 | " | 0 3 | |
| 21 | " | 0 4 | " | 0 | 1 5 | " | 0 2 | noon | 0 6 | " | 0 4 | |
| 22 | " | 0 4 | " | 0 | 2 6 | noon | 0 1 | " | 9 6 | 12 p.m. | 0 5 | |
| 23 | 1 a.m. | 0 3 | " | 0 | 2 8 | 1 a.m. | 0 1 | " | 0 6 | noon | 0 8 | |
| 24 | 12 p.m. | 0 2 | " | 0 | 1 1 | 12 p.m. | S.L. | 1 a.m. | 0 6 | 12 p.m. | 1 9 | |
| 25 | noon | 0 3 | " | 0 | 0 11 | 6 p.m. | S.L. | " | 0 5 | noon | 2 5 | |
| 26 | " | 0 3 | " | 0 | 0 8 | " | S.L. | noon | 0 4 | 1 a.m. | 1 10 | |
| 27 | 1 a.m. | 0 4 | " | 0 | 2 6 | 9 p.m. | 1 3 | " | 0 3 | " | 1 3 | |
| 28 | " | 0 4 | " | 0 | 2 5 | 1 a.m. | 1 3 | 12 p.m. | 0 4 | " | 0 10 | |
| 29 | " | S.L. | " | 0 | 2 5 | 12 p.m. | 1 0 | 1 a.m. | 0 4 | 12 p.m. | 3 6 | |
| 30 | noon | below 0 | 9 p.m. | S.L. | 5 8 | 5 p.m. | 1 6 | noon | 0 3 | " | 5 8 | |
| 31 | " | 0 2 | noon | S.L. | | " | 1 9 | 1 p.m. | 0 3 | 1 p.m. | 6 11 | |

HOUSE FLOODS FROM RETURNS TO THE CITY SURVEYOR.
COMPARATIVE TABLE, 1899.

| Date. | Nidd at Pateley Bridge. | | Ure at Middleham Bridge. | | Swale at Richmond. | |
|---------|-------------------------|---------|--------------------------|---------|--------------------|---------|
| | Hour. | Height | Hour. | Height | Hour. | Height |
| | | ft. in. | | ft. in. | | ft. in. |
| Jan. 12 | | | | | 4-30 p.m. | 3 0 |
| " 13 | | | 7 a.m. | 4 0 | | |
| " 16 | | | 7 a.m. | 6 10 | | |
| " 18 | | | | | 6 p.m. | 4 0 |
| " 19 | 9 a.m. | 7 0 | 8 a.m. | 12 2 | 9 a.m. | 6 6 |
| " 20 | | | 12 mid. | 5 2 | | |
| " 21 | | | 4 p.m. | 11 0 | 4 p.m. | 4 0 |
| " 23 | | | 7 a.m. | 6 6 | | |
| Feb. 8 | | | 1 p.m. | 4 0 | | |
| " 9 | | | 4 p.m. | 5 0 | | |
| " 10 | | | 4 p.m. | 4 9 | | |
| Mar. 29 | | | 7 a.m. | 4 0 | | |
| April 7 | | | 6 a.m. | 4 10 | | |
| " 15 | | | 7 a.m. | 3 6 | | |
| May 12 | | | 7 a.m. | 4 0 | | |
| " 20 | | | 6 a.m. | 4 0 | | |
| " 24 | | | 6 a.m. | 3 0 | | |
| July 12 | | | 8 p.m. | 9 0 | 6-30 p.m. | 5 0 |
| " 26 | | | 10 a.m. | 2 6 | | |
| Sept. 2 | | | 11 a.m. | 2 1 | | |
| " 18 | | | 4 p.m. | 2 1 | | |
| " 22 | | | 6 a.m. | 6 1 | | |
| " 26 | | | 4 p.m. | 3 0 | | |
| " 29 | | | 11 a.m. | 3 1 | | |
| " 30 | | | 11 a.m. | 9 10 | 11-30 a.m. | 6 0 |
| Oct. 2 | | | 7 a.m. | 5 0 | 6 a.m. | 4 0 |
| " 3 | | | 4 p.m. | 2 4 | | |
| " 30 | | | 7 a.m. | 4 0 | | |
| Nov. 3 | | | 7 a.m. | 4 0 | | |
| " 5 | | | 7 a.m. | 7 8 | | |
| " 8 | | | 7 a.m. | 5 6 | 9 a.m. | 2 6 |
| " 10 | | | 4 p.m. | 4 0 | | |
| " 11 | | | 4 p.m. | 9 2 | | |
| Dec. 30 | | | 4 p.m. | 6 2 | | |

YORK—THE MUSEUM.
SUNSHINE VALUES.

| 1899. | Sunshine Returns. | | |
|-----------|-------------------|--------------------|--------------------|
| | Total hours. | Per-centage, 1899. | Per-centage, 1898. |
| January | 19·3 | 8 | 7 |
| February | 74·8 | 28 | 32 |
| March | 120·3 | 33 | 33 |
| April | | | 24 |
| May | | | 30 |
| June | | | 30 |
| July | | | 42 |
| August | | | 31 |
| September | | | 33 |
| October | | | 21 |
| November | | | 12 |
| December | | | 8 |
| Year | | | 25·3 |

YORK—THE MUSEUM.

| 1899. | Highest Barometer. | Lowest Barometer. |
|-----------|--------------------------|--------------------------|
| January | 30·774 26th, 9 a.m. | 28·795 2nd, 9 a.m. |
| February | 30·595 28th, 9 a.m. | 28·969 13th, 9 p.m. |
| March | 30·575 1st, 9 a.m. | 28·990 9th, 9 a.m. |
| April | 30·278 22nd, 6 p.m. | 29·041 7th, 8 a.m. |
| May | 30·531 6th, 9 a.m. | 29·369 15th, 9 a.m. |
| June | 30·496 8th, 9 a.m. | 29·400 20th, 9 p.m. |
| July | 30·464 31st, 9 a.m. | 29·372 1st, 9 p.m. |
| August | 30·402 1st, 9 a.m. | 29·640 31st, 9 p.m. |
| September | 30·202 10th, 9 p.m. | 29·265 30th, 9 a.m. |
| October | 30·449 21st, 9 p.m. | 29·231 1st, 9 p.m. |
| November | 30·735 17th, 9 a.m. | 29·170 8th, 9 a.m. |
| December | 30·515 3rd, 9 p.m. | 28·389 29th, 9 p.m. |
| Year | 30·774 Jan. 26th, 9 a.m. | 28·389 Dec. 29th, 9 p.m. |

THE TREASURER IN ACCOUNT WITH THE YORKSHIRE

| Previous Year. | Dr. | INCOME. | | | | | | £ | s. | d. | £ | s. | d. |
|-------------------|--|---------|-----|-----|-----|-----|-----|-----|----|----|------|----|----|
| | <i>Subscriptions:—</i> | | | | | | | | | | | | |
| | Town Members | ... | ... | ... | ... | ... | ... | 659 | 0 | 0 | | | |
| | Country Members | ... | ... | ... | ... | ... | ... | 9 | 0 | 0 | | | |
| | Lady Subscribers | ... | ... | ... | ... | ... | ... | 59 | 10 | 0 | | | |
| | Associates | ... | ... | ... | ... | ... | ... | 6 | 0 | 0 | | | |
| | Arrears received | ... | ... | ... | ... | ... | ... | 27 | 0 | 0 | | | |
| | For Keys of Gates | ... | ... | ... | ... | ... | ... | 68 | 1 | 0 | | | |
| 812 | | | | | | | | | | | 828 | 11 | 0 |
| | <i>Donation:—</i> | | | | | | | | | | | | |
| | York University Extension Society | ... | ... | ... | ... | ... | | | | | 2 | 2 | 0 |
| | <i>Rents:—</i> | | | | | | | | | | | | |
| | Major Allenby, St. Mary's Lodge | ... | ... | ... | ... | ... | ... | 65 | 0 | 0 | | | |
| | Mr. Hill, Marygate Baths | ... | ... | ... | ... | ... | ... | 40 | 0 | 0 | | | |
| | York Amateur Rowing Club | ... | ... | ... | ... | ... | ... | 5 | 0 | 0 | | | |
| | York and District Field Naturalists Society, less £1 paid to Attendant | ... | ... | ... | ... | ... | ... | 2 | 0 | 0 | | | |
| | York Waterworks Company | ... | ... | ... | ... | ... | ... | 0 | 1 | 0 | | | |
| | Corporation of York | ... | ... | ... | ... | ... | ... | 2 | 0 | 0 | | | |
| | Yorkshire School for the Blind | ... | ... | ... | ... | ... | ... | 0 | 1 | 0 | | | |
| 114 | | | | | | | | | | | 114 | 2 | 0 |
| | Hire of Tent and Tables | ... | ... | ... | ... | ... | ... | 15 | 8 | 9 | | | |
| | Less: Expenses of Carriage, Fixing, Repairs, and like | ... | ... | ... | ... | ... | ... | 7 | 12 | 8 | | | |
| 0 | | | | | | | | | | | 7 | 16 | 1 |
| | Whitsuntide Admission Fees | ... | ... | ... | ... | ... | ... | 12 | 9 | 3 | | | |
| | Less: Attendants and Police | ... | ... | ... | ... | ... | ... | 4 | 2 | 0 | | | |
| 7 | | | | | | | | | | | 8 | 7 | 3 |
| | <i>Meteorological Department:—</i> | | | | | | | | | | | | |
| | Contributions from Meteorological Council | ... | ... | ... | ... | ... | ... | 5 | 4 | 0 | | | |
| | Subscriptions towards cost of Anemometer | ... | ... | ... | ... | ... | ... | 28 | 10 | 0 | | | |
| 15 | | | | | | | | | | | 33 | 14 | 0 |
| 6 | Sale of Catalogues | ... | ... | ... | ... | ... | ... | | | | 5 | 16 | 0 |
| 2 | Sale of Photographs | ... | ... | ... | ... | ... | ... | | | | 2 | 3 | 0 |
| | Sale of Books | ... | ... | ... | ... | ... | ... | | | | 3 | 2 | 6 |
| 2 | Bank Interest | ... | ... | ... | ... | ... | ... | | | | 4 | 2 | 0 |
| 209 | Gate Money | ... | ... | ... | ... | ... | ... | | | | 221 | 9 | 2 |
| 7 | Tennis Courts | ... | ... | ... | ... | ... | ... | | | | 4 | 8 | 0 |
| 20 | Interest on £918 8s. 9d., India 3% Stock, less Income Tax | ... | ... | ... | ... | ... | ... | | | | 26 | 12 | 8 |
| 1190 | | | | | | | | | | | 1262 | 5 | 8 |

| | | | | | | |
|-----------------------------------|-----|-----|-----|-------|----|---|
| Excess of Expenditure over Income | ... | ... | ... | 12 | 19 | 9 |
| | | | | £1275 | 5 | 5 |

| | | | | |
|--|-----|-----|----|---|
| Balance in hands of the Treasurer, 31st December, 1899 | ... | 143 | 13 | 9 |
|--|-----|-----|----|---|

| | | | | |
|-----|--|------|----|---|
| 156 | | £143 | 13 | 9 |
|-----|--|------|----|---|

Examined and found correct,

J. A. CUNNINGHAME.

EDWIN GRAY, *Honorary Treasurer.*

PHILOSOPHICAL SOCIETY FOR YEAR ENDING 31ST DEC., 1899.

Previous
Year.

EXPENDITURE.

Cr.

£ s. d. £ s. d. £ s. d.

| | | | | | | | | | | | |
|------|--|----|----|----|--|-----|----|---|-------|----|----|
| 1 | Crown Rent | | | | | | | | 1 | 0 | 0 |
| 19 | Corporation Rent | | | | | | | | 19 | 8 | 4 |
| | <i>Rates and Taxes:—</i> | | | | | | | | | | |
| | Rates and Taxes, Parishes of St. Wilfrid, St. Olave, and St. Michael-le-Belfrey ... | | | | | 27 | 5 | 8 | | | |
| | Waterworks Company's Rate | | | | | 4 | 8 | 3 | | | |
| | Gardeners' Licenses | | | | | 2 | 5 | 0 | | | |
| | Receipt and Cheque Books Stamping ... | | | | | 1 | 13 | 2 | | | |
| 36 | | | | | | | | | 35 | 12 | 1 |
| | Insurance | | | | | | | | 7 | 5 | 0 |
| | <i>Salaries and Wages:—</i> | | | | | | | | | | |
| | Mr. Platnauer | | | | | 150 | 0 | 0 | | | |
| | Mr. Fielden | | | | | 60 | 0 | 0 | | | |
| | Miss Baines | | | | | 41 | 12 | 0 | | | |
| | Mr. Guy | | | | | 30 | 0 | 0 | | | |
| | <i>Attendants at Museum and Hospitium, viz.:—</i> | | | | | | | | | | |
| | Attendant at Museum | 65 | 0 | 0 | | | | | | | |
| | Female Attendant at Museum | 31 | 4 | 0 | | | | | | | |
| | Female Attendant at Hospitium | 32 | 10 | 0 | | | | | | | |
| | | | | | | 128 | 14 | 0 | | | |
| | Gardeners, including temporary labour and extra duty at Gates, &c. | | | | | 114 | 6 | 6 | | | |
| 510 | | | | | | | | | 524 | 12 | 6 |
| 198 | *Yorkshire Insurance Company, Annuity ... | | | | | | | | 198 | 5 | 9 |
| | <i>General Repairs and Expenses:—</i> | | | | | | | | | | |
| | Museum and Hospitium, Additional Repairs and Expenses | | | | | 36 | 4 | 3 | | | |
| | <i>Gardens:—</i> | | | | | | | | | | |
| | Repairing and Painting Greenhouses, and Building new Cold Frames | 36 | 6 | 10 | | | | | | | |
| | Repairing Fountain Pond | 3 | 4 | 3 | | | | | | | |
| | General Additions, Repairs, and Expenses | 12 | 17 | 5 | | | | | | | |
| 29 | Estate:— | | | | | 52 | 8 | 6 | | | |
| | Builders' and Joiners' Work | 8 | 6 | 10 | | | | | | | |
| | Slaters' Work | 5 | 9 | 5 | | | | | | | |
| | Painting and Paperhanging | 1 | 15 | 0 | | | | | | | |
| | Smiths', Plumbers', and like work | 2 | 3 | 1 | | | | | | | |
| | Drainage | 52 | 3 | 3 | | | | | | | |
| | Bronze Tablet for Abbey Gateway | 15 | 0 | 0 | | | | | | | |
| 58 | | | | | | 84 | 17 | 7 | | | |
| 139 | Music, Tennis, Bowls, and other Outdoor Enter- tainments | | | | | | | | 173 | 10 | 4 |
| 9 | | | | | | | | | 12 | 9 | 11 |
| 23 | Library—Books and Binding | | | | | | | | 31 | 4 | 10 |
| 47 | Lectures | | | | | | | | 42 | 13 | 10 |
| 3 | Printing and Stationery | | | | | | | | 5 | 8 | 1 |
| 23 | Printing Reports and Postage thereof ... | | | | | | | | 20 | 8 | 6 |
| | Printing Communications to Members and Postage of same | | | | | | | | 10 | 5 | 5 |
| 12 | <i>Gas, Coal, and Coke:—</i> | | | | | | | | | | |
| | Museum | 26 | 4 | 5 | | | | | | | |
| | Gardens | 12 | 10 | 10 | | | | | | | |
| | Estate | 16 | 16 | 7 | | | | | | | |
| 45 | | | | | | | | | 55 | 11 | 10 |
| | Ornithological Department | | | | | | | | 23 | 1 | 0 |
| 13 | Antiquarian Department | | | | | | | | 26 | 4 | 8 |
| | <i>Meteorological Department:—</i> | | | | | | | | | | |
| | Observations | 15 | 12 | 0 | | | | | | | |
| | Anemometer | 39 | 17 | 0 | | | | | | | |
| | | | | | | | | | 55 | 9 | 0 |
| 2 | Preparing Photographs for sale | | | | | | | | 0 | 12 | 4 |
| 7 | Sundry Postages | | | | | | | | 8 | 5 | 10 |
| 1 | Sundries, including carriage of Parcels ... | | | | | | | | 3 | 0 | 7 |
| | New Locks and Keys for Garden Gates, and Repairs to Gates | | | | | | | | 20 | 15 | 7 |
| 1132 | | | | | | | | | £1275 | 5 | 5 |
| | Balance in hands of the Treasurer, 31st December, 1898 ... | | | | | | | | 156 | 13 | 6 |
| | Excess of Expenditure over Income, 1899 | | | | | | | | 12 | 19 | 9 |
| 156 | | | | | | | | | £143 | 13 | 9 |

* Annuity of £201 8s. 0d. payable until October, 1914, inclusive, created to repay an advance of £3500 made by the Yorkshire Insurance Co.

Principal repaid 1244 18 10
" outstanding 2255 1 2

Original Advance £3500 0 0

THE TREASURER'S ACCOUNT IN CONNECTION WITH THE FUND FOUNDED BY THE LATE
WM. REED, ESQ., FOR SPECIFIC PURPOSES.

| Dr. | INCOME. | EXPENDITURE. | | Cr. |
|---|---------|-------------------|--------|----------|
| | | | | £ s. d. |
| Interest on £600 York Corporation 3 per cent Redeem- able Stock, less Income Tax | | 17 | 8 | 0 |
| Interest on £50 placed on deposit at York City and County Bank | | 1 | 5 | 0 |
| | | | | <hr/> |
| | | | | £18 13 0 |
| | | | | <hr/> |
| | | Books and Binding | | 18 13 0 |
| | | | | <hr/> |
| | | | | £18 13 0 |
| | | | | <hr/> |

| BALANCE SHEET. | | | |
|---------------------------------------|---------|--|-----------|
| | £ s. d. | | £ s. d. |
| Amount of Fund on 31st December, 1899 | | Amount invested in York Corporation 3 per cent | |
| | | Redeemable Stock | |
| | | Amount placed on Deposit at York City and County | 600 0 0 |
| | | Bank | |
| | | Cash in hand | 50 0 0 |
| | | | 37 19 2 |
| | | | <hr/> |
| | | | £687 19 2 |
| | | | <hr/> |

NEW MEMBERS.—1899.

Allanson, Mrs., *Bootham House*.
 Arlidge, Miss, *St. Stephen's Orphanage*.
 Auden, G. A., 76, *Bootham*.
 Barstow, Miss F. A., *Garrow Hill*.
 Border, Samuel, *Coney Street*.
 Broughall, Edward, 21, *Bootham Terrace*.
 Brown, James, 29, *Queen Anne's Road*.
 Burt, Arthur, D.Sc., *Acomb*.
 Burt, Philip, *St. George's Place, The Mount*.
 Cotsworth, M. B., *Holgate*.
 Cudworth, W. J., "*Thornleigh*," *Clifton*.
 Elsworth, W. T., 18, *High Ousegate*.
 Haggitt, J. R., 10, *Queen Anne's Road*.
 Hallows, G. P. B., 48, *Queen Anne's Road*.
 Herron, Capt. R. D., 110, *Bootham*.
 Head Mistress of the High School, *Fishergate*.
 Humphreys, W. H., *The Waterworks*.
 Johnson, Mrs. H. M., 28, *St. Mary's*.
 Jones, Mrs., 23, *St. Mary's*.
 Machell, Hon. Mrs., 13, *St. Mary's*.
 Meyer, Sebastian W., 9, *Park Street*.
 Oldfield, Ernest, 9, *St. Leonard's*.
 Page, W., 29, *St. Mary's*.
 Peters, Joseph, *Tile House, St. George's Place*.
 Richardson, Hugh, 12, *St. Mary's*.
 Roberts, Lieut. L. S., A.S.C., 26, *Petergate*.
 Rowntree, B. S., 32, *St. Mary's*.
 Rowntree, Theodore H., 18, *Bootham Crescent*.
 Wragge, R. H. V., *Market Street*.

NEW LADY SUBSCRIBERS.

Bell, Miss, 35, *Grosvenor Terrace*.
 Burke, Mrs., 4, *Grosvenor Terracc*.
 Chapman, Miss F., 11, *Minster Yard*.
 Coates, Miss C., 19, *Gillygate*.
 Jepson, Miss F. C., 35, *The Mount*.
 Russell, Miss, 72, *Petergate*.

DONATIONS TO MUSEUM AND LIBRARY.

LIBRARY.

| BOOKS PRESENTED. | DONORS. |
|--|------------------|
| The Quarterly Journal of the Geological Society of London, Vol. lv., 1899. | The Society. |
| The Report of the British Association for the Advancement of Science, Bristol, 1898. | |
| The Journal of the Chemical Society of London, Nos. 434 to 441, 1899. | The Society. |
| Transactions of the Zoological Society of London, Vol. xv., Parts 1, 2, 3. Proceedings, Parts 3, 4, 1898; 1, 2, 3, 1899. | The Society. |
| Catalogue of Birds, Vol. xxvi, of the Lepidoptera Phalænæ, Vol. i. and Vol. i. Plates; Welwitsch's African Plants, Vol. i., Parts 2, 3; Vol. ii., Part 1; List of the Genera and Species of Blastoidea; Hand list of Birds, Vol. i.; and List of the Type and figured Specimens of Fossil Cephalopoda in the British Museum. | |
| Memoirs and Proceedings of the Manchester Literary and Philosophical Society, Vol. xliii., Nos. 1, 2, 4. | The Society. |
| The Bulletin of the American Geographical Society, Vol. xxx., No. 5; Vol. xxxi., Nos. 1, 2, 3, 4. | |
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Nebraska, U.S., Agricultural Experi-
ment Station, Vol. xi. } The University.
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of Sciences, Arts, and Letters, Vol.
xi. and xii., Part 1. } The Academy.
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Banks of the Costa at Pickering. } Hon. Cecil Duncombe
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| R. Mosis Majemonidæ de Sacrificiis Liber, dated 1683. | Mr. Poole. |
| Notes on the Molar of a Trilophodont Mastodon, by Prof. E. Ray Lankester. | The Author. |
| General Guide to the Natural History Collections Report of the Manchester Museum, 1898-9; Index to the Sys- tema Naturæ of Linnæus, by G. Davies Sherborn. | Museum Committee. |
| The Geological Structure of the upper portion of Dundry Hill and the development of Rivers, by S. S. Buckman, F.G.S. | The Author. |
| Official Guide to the Norwich Castle Museum, and five Annual Reports. | The Curator. |
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| Report of the Penzance Natural History and Antiquarian Society, 1897-8, | The Society. |
| Report on the Wyalong Gold-Field, by J. A. Watt. | N.S.W. Government. |
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| Fourth Report of the Whitechapel Museum Commissioners. | The Committee. |
| Notes on the Palæontology of the Manx Slates, by H. Bolton. | The Author. |
| The Eastern Margin of the North Atlantic Basin, by W. H. Hudleston, F.R.S. | The Author. |
| 33rd Report of the Cambridge Museums and Lecture Rooms Syndicate. | The Committee. |
| Guide to Queensland and International Catalogue of Scientific Literature. | Agent-General for Queensland. |
| Bolletini della Biblioteca Nazionale Centrale di Firenze, 1899. | The Compiler. |
| A Series of Astronomical Books. | Mr. E. S. Cox. |

GEOLOGICAL DEPARTMENT.

- A Series of Fossils from the Silkstone } Mr. A. F. Brown
Coal Mine, Normanton.
- Fossil Shells and Ammonite, found in }
sinking a well at Lilling, Sheriff } Mr. J. Smith,
Hutton. } Stockton-on-Forest.

ANTIQUITIES.

- A fine Mediæval Jug, some fragments }
of Samian Ware, and various other } Mr. James Melrose,
Antiquities found in Davygate ; also } J.P.
a stone adze found near Haxby.
- A Cannon Ball found at Myton. } Mr. Haw, Bootham.
- An old Pocket Dial. } Mr. J. T. Pegg.
- An old carved oak Figure. } Mr. T. B. Whytehead.

ZOOLOGY & COMPARATIVE ANATOMY.

- Four Sea Urchins from the Farne }
Island ; a Sparrow Hawk and com- } Mr. Oxley Grabham,
mon Crow, shot at Cottingwith. } M.A.
- Twenty-eight Skins of British Birds. } Mr. J. Backhouse,
F.Z.S.
- A Golden-Crested Wren, picked up in }
Driffeld Terrace. } Mr. C. E. Elmhirst.
- Two pairs of Horns and Skulls of the }
Reindeer. } Mr. Geo. Hooper.
- Rostrum of Saw Fish ; Skin of Snake ; }
two Skulls of Birds ; etc. } Mrs. M. A. Dennis.

BOTANY.

- Specimens of *Rubus chamæmorus*, Linn. }
Linnea corralis, Gronov. } Mr. F. H. Weekes.

MISCELLANEOUS.

- A Barograph. } Mr. R. Thompson.
- A Collection of Sun-Dials and Com- }
passes. } Mr. E. S. Cox.

PRELIMINARY CATALOGUE

OF THE

BRITISH BIRD COLLECTIONS

IN THE POSSESSION OF THE
YORKSHIRE PHILOSOPHICAL SOCIETY,

BY THE
HON. CURATOR, JAMES BACKHOUSE, F.L.S., M.B.O.U., F.Z.S., &c.

PART I.

Order, **PASSERES.** Sub-order, **OSCINES.**

Section, **Oscines Dentirostres.**

Family, **Turdidæ.** Sub-Family, **Turdinæ.**

Genus **Turdus.**

| SPECIMENS MOUNTED OR SKINS. | SKELETONS. | EGGS. | CASE No. |
|--|---------------|--|----------|
| Turdus viscivorus Linn. <i>Mistle Thrush.</i> { No. 1. South Road, Durham, July, '95 (Raine) { 2 & 3. Adults, York Nurseries (Backhouse) | ... | 6 clutches, York, Riccall, Giggleswick, &c.; the last named an abnormally small clutch | I |
| T. musicus Linn. <i>Song Thrush.</i> A & B. Isle of Wight, 1867 (Farman). Skins | 'Allis' Coll. | 3 clutches from York 2 clutches from Giggleswick of the unspotted variety | ... |
| T. iliacus Linn. <i>Redwing.</i> Seamer Moor, nr. Scarbro', Dec., '89 (Head) York, 2 adults (Backhouse) | ... | 1 clutch of 5, Lapland; purchased | III |

| SPECIMENS MOUNTED OR SKINS. | SKELETONS. | EGGS. | CASE No. |
|---|---------------|---|-----------|
| T. pilaris Linn. <i>Fieldfare.</i> 1 & 2. Adults, Bridlington, autumn, '95 (Boynton) Skin of adult, Cookham (Sharp) '79 | 'Allis' Coll. | 1 clutch of 4, Lapland 1 ,, 4, Saxony 1 ,, 3, Saxony ; all purchased | IV |
| T. varius Pall. <i>White's Thrush.</i> 1 & 2. Strickland Collection, without data Adult Rimswell (Stathers, presented) (See "Zoologist," 1882, p. 74.) | ... | | V VA |
| T. merula Linn. <i>Blackbird.</i> 2 males and 1 female, adults, Isle of Wight, '67. Skins (Bree Collection). Purchased Cases of Varieties, "Rudston" Coll., local specimens. VARIETY ad. female, Museum Gardens, May, 1899 (No. 2) | 'Allis' Coll. | Several local clutches | VI VIA |
| T. torquatus Linn. <i>Ring Ousel.</i> 1. Adult, Teesdale, May, '88 (Back- house) P | ... | 1 clutch of 4, Pickering Moors 1 ,, 3, Sheffield | VII |
| Genus Monticola. | | | |
| Monticola saxatilis (Linn). Skin of adult, Bree Collection, without data. Purchased | ... | 1 egg without data | ... |
| Sub-Family CINCLINÆ. | | | |
| Genus Cinclus. | | | |
| Cinclus aquaticus Bechst. <i>Dipper.</i> Holgate, York, May, '94* 2 adult skins, Bree Collection, no data * See Y.P.S. Report, 1895, p. | 'Allis' Coll. | Clutch of 5 eggs | IX |

| SPECIMENS MOUNTED OR SKINS. | SKELETONS. | EGGS. | CASE No. |
|--|------------|--|----------|
| C. melanogaster C. L. Brehm. <i>Black-bellied Dipper.</i> Welwick, Holderness (Clarke), presented* Adult, skin, Sweden '73, Bree Collection * See Y.N. Union Transactions (Birds), p. 67 (1879). | ... | Clutch of 2 eggs | X |
| Sub-Family SAXICOLINÆ. Genus Saxicola. | | | |
| Saxicola œnanthe (Linn). <i>Wheatear.</i> Skins of 2 juv. males, Brading, I. of Wight, '67, Bree Coll. Skins of 2 females, St. Boniface Downs, I. of Wight, Aug. '67, Bree Coll. | ... | 2 clutches of 6 from York neighbourhood 1 clutch of 5, Grimston | ... |
| S. Stapazina Vieill Skin of adult male, Asia Minor | P ... | | ... |
| S. deserti Rüpp. <i>Desert Chat.</i> Skin of adult male and female, Tunis | P ... | | ... |
| Genus Pratincola. | | | |
| Pratincola rubetra (Linn). <i>Whinchat.</i> Adult male | ... | 3 clutches from Heworth, York | XIV |
| P. rubicola (Linn). <i>Stonechat.</i> Adult male, Seamer Moor, '88 (Head) | ... | 1 clutch of 6 from Armagh, Ireland | XV |
| Genus Rutilicilla. | | | |
| Rutilicilla phœnicurus (Linn). <i>Redstart.</i> 2 skins, Isle of Wight, '67, Bree Coll. Immature Male, killed at Spurn Lighthouse, May 13, 1899 | ... | 2 clutches, near York 1 clutch of 10 eggs, Rievaulx (Probably a double brood.) | ... |

| SPECIMENS MOUNTED OR SKINS. | SKELETONS. | EGGS. | CASE No. |
|--|------------|--|----------|
| R. titys (Scop). <i>Blackstart.</i> (Strickland Coll.) 1 & 2. Male & female adult, without data Skins of 3 males & 2 females, European killed, Bree Coll. | ... | 1 clutch of 6 eggs from Silesia | XVII |
| Genus Cyanecula. Cyanecula suecica (Linn). <i>Red-spotted Bluethroat.</i> Skin of female, Europe (Verreaux) | ... | Clutch of 3, no data | ... |
| Cyanecula (wolff) Brehm. <i>White-spotted Bluethroat.</i> Skin of adult male, Europe, (Verreaux) Skin of 2 juv. females ,, ,, | ... | | ... |
| Genus Erythacus. Erythacus rubecula (Linn). <i>Robin.</i> Skin of adult male, Morocco Skin of adult female, Germany | P P | 'Allis' Coll. 6 Yorkshire clutches | ... |
| Genus Daulias. Daulias luscinia (Linn). <i>Nightingale.</i> Skin of Adult male, Essex, '68, Bree Coll. Skin of male, Malta, 1861, Dr. Adams, Bree Coll. | ... | 2 clutches, Wansford 1 clutch, Thetford | ... |
| Sub-Family SYLVIINÆ. Genus Sylvia. | | | |
| Sylvia cinerea Bechst. <i>Whitethroat.</i> Skins of 2 adults, no data, Bree Coll. | ... | 5 clutches from neighbourhood of York 1 clutch from Heworth, extra dark | ... |
| Sylvia curruca (Linn). <i>Lesser Whitethroat.</i> Skins of male and female, Germany | P ... | 4 local clutches | ... |

| SPECIMENS MOUNTED OR SKINS. | | SKELETONS. | EGGS. | CASE No. |
|--|---|---------------|--------------------------------|-------------|
| Sylvia Orphea, Temm. <i>Orphean Warbler.</i> | | | | |
| Skin of adult, Gibraltar (Reid), Bree Coll. | | ... | | ... |
| Sylvia atricapilla (Linn). <i>Blackcap.</i> | | | | |
| Skins of adult male & female, Morocco | P | ... | 4 clutches from neighbourhood | ... |
| Skin of male, Easington | P | | of York | |
| Sylvia salicaria (Linn). <i>Garden Warbler.</i> | | | | |
| Skin of male, Cremona | P | ... | 3 (?) clutches York district | ... |
| Skin of female, Germany | P | | | |
| Sylvia nisoria (Bechst.) <i>Barred Warbler.</i> | | | | |
| Female shot in garden near Hull (Darley) | | ... | 1 clutch of 4, Silesia | XXVII |
| Genus Melizophilus. | | | | |
| Melizophilus undatus (Bodd). <i>Dartford Warbler.</i> | | ... | 2 clutches, South Spain | ... |
| Genus Regulus. | | | | |
| Regulus cristatus Koch. <i>Goldcrest.</i> | | | | |
| Skin of adult male, Altai | P | 'Allis' Coll. | 1 clutch, Bishopstone | ... |
| Skin of adult female, Roumania | P | | Several without data | |
| R. ignicapillus (C. L. Brehm). <i>Firecrest.</i> | | | | |
| Skins of adult male and female, Altai mountains | P | ... | 1 clutch of 9, Rhenish Prussia | ... |

SPECIMENS MOUNTED OR SKINS.

SKELETONS.

EGGS.

CASE
No.

Sub-Family

PHYLLOSCOPINÆ.

Genus *Philoscopus*.

Phylloscopus superciliosus
(Gmel). *Yellow-browed Warbler*.

...

...

...

...

Phylloscopus rufus (Bechst).
Chiffchaff.

Skins of male and female, Sweden P

...

2 local clutches

...

Phylloscopus trochilus (Linn)
Willow Warbler.

Skin of adult female, I. of Wight, 1867,
Bree Coll.

...

3 local clutches

...

Skin of female, Spurn P

Phylloscopus sibilatrix (Bechst)
Wood Warbler.

Skin of male, Gono ? 1861 (Dr. Adams),
Bree Coll.

...

Clutch of 7, Bohemia
Clutch of 5, Bishopstone

...

Sub-Family

ACROCEPHALINÆ.

Genus *Hypolais*.

Hypolais icterina (vieill). *Icterine*
Warbler.

Skins of adult male and female, Malta,
1861, Dr. Adams (Bree Coll.)

...

...

...

...

Genus *Acrocephalus*.

Acrocephalus streperus (Vieill)
Reed Warbler.

...

2 clutches, Castle Howard

...

| SPECIMENS MOUNTED OR SKINS. | SKELETONS. | EGGS. | CASE No. |
|---|------------|---|-------------|
| Acrocephalus palustris (Bechst) <i>Marsh Warbler.</i> | ... | Clutch of 5, Saxony | ... |
| Acrocephalus arundinaceus (Linn). <i>Gt. Reed Warbler.</i> Skins of male and female, South Russia (Schlüter) | ... | 2 clutches of 5, Anhalt | ... |
| Acrocephalus aquaticus (Gmel) <i>Aquatic Warbler.</i> Skins of adult male and female, Europe (Verreaux) | ... | Clutch of 4, Pomerania | ... |
| Acrocephalus Schoenobænus (Linn). <i>Sedge Warbler.</i> Skins of male and female, Denmark (Bree Coll.) | ... | 3 local clutches | ... |
| Genus Locustella. | | | |
| Locustella nævia (Bodd). <i>Grass-hopper Warbler.</i> | ... | Clutch of 5, Copmanthorpe Clutch of 3, Uppingham | ... |
| Family ACCENTORIDÆ. | | | |
| Genus Accentor. | | | |
| Accentor collaris (Scop). <i>Alpine Accentor.</i> 2 Skins of Adults, without data (Bree Coll.) Skin of adult male, Spurn Point, 1882 (Clarke) | ... | One egg, local (?) | ... |
| Accentor modularis (Linn). <i>Hedge Accentor.</i> | ... | 3 local clutches | ... |

SPECIMENS MOUNTED OR SKINS.

SKELETONS.

EGGS.

CASE
No.

Family PANURIDÆ.

Genus Panurus.

Panurus biarmicus (Linn).

Bearded Titmouse.

- (1. Ad. male, South Russia (Marsden)
 2. Male, Norfolk, 1885 (Somerton)
 3. Female „ „

Sclerotic
 rings,
 Allis Coll.

1 clutch (8), Potter Heigham XLIV
 1 „ (5), in nest, Horsey
 Mere

Family PARIDÆ.

Genus Acredula.

Acredula rosea (Blyth). *Long-tailed Titmouse.*

Skins of 2 males, Bournemouth
 (Marsden)

...

Clutch of 4, Langton
 „ 10, Hampshire

...

Genus Parus.

Parus major Linn. *Great Titmouse.*

Skin of adult male, Essex, Bree Coll.

Skin of adult, Yorks. (Clarke) P

...

2 local clutches

...

Parus britannicus, S. & D. *Cole Titmouse.*

Skin of adult, Teesdale, 1882 (Backhouse) P

...

2 clutches, Thetford
 1 clutch, Langton

...

Parus palustris, Linn. *Marsh Titmouse.*

Skin of adult female, Wilstrop, nr. York,
 1885 (Backhouse) P

...

2 clutches, Thetford

...

Skin of female, Church Fenton, 1885
 (Backhouse) P

Parus cæruleus, Linn. *Blue Titmouse.*

Skin of adult male, Easington, Holderness, 1883 (Clarke) P

...

2 clutches, Midhurst

...

Skin of female, York, 1883 (Backhouse) P

Parus cristatus, Linn. *Crested Titmouse.*

Skins of 2 adult males, Sweden, Bree Coll.

...

2 clutches (1 foreign)

...

| SPECIMENS MOUNTED OR SKINS. | SKELETONS. | EGGS. | CASE No. |
|--|------------|---------------------------|-------------|
| Family SITTIDÆ. | | | |
| Genus Sitta. | | | |
| Sitta cæsia, Wolf. <i>Nuthatch.</i> | ... | 1 clutch, 6, Silesia | LI |
| { 1. Clumber (Lambert) P | | | |
| { 2 & 3. Strickland Coll., without data | | | |
| Family CERTHIIDÆ. | | | |
| Genus Certhia. | | | |
| Certhia familiaris, Linn. <i>Creeper.</i> | ... | 1 clutch, Heslington | LVII |
| { 1. Stamford Bridge, 1890 | | 1 ,, Bohemian, extra fine | |
| { 2 & 3. Clumber (Lambert) P | | 1 ,, Wansford | |
| Family TROGLODYTIDÆ. | | | |
| Genus Troglodytes. | | | |
| Troglodytes parvulus, Koch. | | | |
| <i>Common Wren.</i> | | | |
| 1. Adult, York, 1894 P | ... | 3 local clutches | LVIII |
| Skin of Female, Isle of Wight, 1867, (Bree Coll.) | | | |
| Family MOTACILLIDÆ. | | | |
| Genus Motacilla. | | | |
| Motacilla alba, Linn. <i>White Wagtail</i> | ... | 2 clutches, Saxony | ... |
| Skins of adult male and female, Bohemia | | | |
| Motacilla lugubris, Temm. <i>Pied Wagtail.</i> | | | |
| Skins of male and female, Isle of Wight, 1867, Bree Coll. | ... | 3 local clutches | ... |
| Motacilla melanope, Pall. <i>Grey Wagtail.</i> | ... | ... | ... |
| Skin of female, Amur River (Tancré) | | | |

CATALOGUE OF BRITISH PLANTS IN THE HERBARIUM
OF THE
YORKSHIRE PHILOSOPHICAL SOCIETY.

PART VI.

COMPILED BY HENRY J. WILKINSON, HON. CURATOR, BOTANY.

ROSACEÆ.

| | DATE. | COLLECTOR. | HERBARIUM. |
|--|-------|--------------|----------------|
| 365. Prunus communis, Huds. Sloe. <i>Copses, &c., Sutherland to Channel Islands.</i> <i>Distrib.</i> Europe. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Thorparch, ,, | 1840 | S. Hailstone | S. Hailstone |
| 366. Prunus insititia, Linn. Bullace. <i>Copses, &c., Lanark southward.</i> <i>Distrib.</i> Europe, N. Africa, Himalaya. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Pontefract, ,, | 1832 | S. Hailstone | ,, |
| 367. Prunus Cerasus, Linn. Wild Cherry. <i>Copses, &c., Yorkshire southward.</i> <i>Distrib.</i> Europe, W. Himalaya, &c. | | | |
| <i>Sp.</i> Woods in Kent | 1811 | S. Hailstone | S. Hailstone |

| | DATE. | COLLECTOR. | HERBARIUM. |
|---|---------------|-----------------|-----------------|
| 368. Prunus padus, Linn. | | | |
| Bird Cherry. <i>Copses, &c., Caithness to Wales.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), N. Africa, N. & W. Asia. | | | |
| Sp. Hackfall, Ripon | 1790 | J. Dalton | Rev. J. Dalton |
| Shipley, Yorks. | 1800 | S. Hailstone | S. Hailstone |
| High Force, Teesdale, Yorks. and Durham | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 369. Spiræa Salicifolia, Linn. | | | |
| <i>Plantations, &c.; not indigenous.</i> | | | |
| Sp. Near Green Hammerton, Yorks. ... | 1800 | J. Dalton | Rev. J. Dalton |
| 370. Spiræa ulmaria, Linn. | | | |
| Meadow-sweet. <i>Moist places, Shetland to Channel Islands.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), N. Asia, &c. | | | |
| Sp. Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Clifton Ings, York | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 371. Spiræa filipendula, Linn. | | | |
| Dropwort. <i>Dry Pastures, &c., Caithness southward.</i> | | | |
| <i>Distrib.</i> Europe, N. Africa, N. Asia. | | | |
| Sp. Devil's Ditch, Stetworth, Cambs. ... | 1839 | S. Hailstone | S. Hailstone |
| Thorparch, Yorks. | June 30, 1849 | Mr. Birkbeck | " |
| Near Newark, Notts. | 1892 | H. J. Wilkinson | H. J. Wilkinson |
| 372. Rubus Chamæmorus, Linn | | | |
| Cloudberry. <i>Peaty Alpine Moors, Caithness to Derby.</i> | | | |
| <i>Distrib.</i> N. Europe (Arctic), Siberia. | | | |
| Sp. Ingleborough, Yorks. | 1803 | J. Dalton | Rev. J. Dalton |
| Blair Athol, Perths. | 1809 | " | " |
| Morrone, Braemar, Aberdeens. ... | 1887 | H. Fisher | H. J. Wilkinson |
| " " " | 1898 | F. H. Weekes | F. H. Weekes |
| Cronkley Fell, Yorks. | 1883 | H. J. Wilkinson | H. J. Wilkinson |

| | DATE. | COLLECTOR. | HERBARIUM. |
|---|------------|-----------------|-----------------|
| 373. <i>Rubus saxatilis</i>, Linn. | | | |
| <i>Stony banks and copses, from Cornwall to Devon.</i> | | | |
| <i>Distrib.</i> Europe, N. & W. Asia. | | | |
| <i>Sp.</i> Mackershaw Woods, Ripon | 1790 | J. Dalton | Rev. J. Dalton |
| Castle Howard, Yorks. | 1798 | R. Teesdale | ,, |
| Beckdale, Helmsley, Yorks. | 1885 | H. J. Wilkinson | H. J. Wilkinson |
| 374. <i>Rubus Idæus</i>, Linn. | | | |
| <i>Raspberry. Woods, &c., from Orkney southwards.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), N. Africa, &c. | | | |
| <i>Sp.</i> Mackershaw Woods, nr. Ripon | 1790 | J. Dalton | Rev. J. Dalton |
| Crambe Beck, Castle Howard, Yorks. | 1885 | H. J. Wilkinson | H. J. Wilkinson |
| 375. <i>Rubus affinis</i>, W. & N. | | | |
| Bramble, Blackberry. | | | |
| <i>Sp.</i> Croft, N. Yorks. | 1830 | J. Dalton | Rev. J. Dalton |
| Langwith, E. Yorks. | 1885 | H. J. Wilkinson | H. J. Wilkinson |
| 376. <i>Rubus Lindleianus</i>, Lees. | | | |
| <i>Sp.</i> Langwith, York | 1840 | O. A. Moore | O. A. Moore |
| Skipwith, ,, | 1885 | H. J. Wilkinson | H. J. Wilkinson |
| 377. <i>Rubus rhamnifolius</i>, W. & N. | | | |
| <i>Sp.</i> Croft, N. Yorks. | 1830 | J. Dalton | Rev. J. Dalton |
| Skipwith, ,, | 1885 | H. J. Wilkinson | H. J. Wilkinson |
| 378. <i>Rubus imbricatus</i>, Hort. | | | |
| <i>Sp.</i> Glen Frome, W. Gloucester | Aug., 1883 | J. W. White | H. J. Wilkinson |

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| 379. <i>Rubus leucostachys</i>, Sm. | | | |
| <i>Sp.</i> Leigh Wood, Somerset | 1884 | H. Fisher | H. J. Wilkinson |
| Langwith, York | 1885 | H. J. Wilkinson | „ |
| 380. <i>Rubus carpinifolius</i>, W. & N. | | | |
| <i>Sp.</i> Heslington, and Langwith, York ... | 1885 | H. J. Wilkinson | H. J. Wilkinson |
| 381. <i>Rubus macrophyllus</i>, W. <i>Umbrosus</i> , Arrh. | | | |
| <i>Sp.</i> Skipwith, York | 1885 | H. J. Wilkinson | H. J. Wilkinson |
| 382. <i>Rubus sprengelii</i>, Weihe. | | | |
| <i>Sp.</i> Skipwith, York | 1885 | H. J. Wilkinson | H. J. Wilkinson |
| 383. <i>Rubus rosaceus</i>, W. & N. | | | |
| <i>Sp.</i> Langwith, York | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 384. <i>Rubus rudis</i>, Weihe. | | | |
| <i>Sp.</i> Abbots Leigh, Somersets. | 1884 | H. Fisher | H. J. Wilkinson |
| 385. <i>Rubus radula</i>, Weihe. | | | |
| <i>Sp.</i> Clifton Down, Somersets. | 1884 | H. Fisher | H. J. Wilkinson |
| 386. <i>Rubus corylifolius</i>, Sm. | | | |
| <i>Sp.</i> Langwith, York | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 387. <i>Rubus cæsius</i>, Linn. Dewberry. | | | |
| <i>Sp.</i> Skipwith, York | 1883 | H. J. Wilkinson | H. J. Wilkinson |

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| 388. Dryas octopetala, Linn. | | | |
| <i>Limestone and mountain districts,</i> | | | |
| <i>Orkney to Carnarvon.</i> | | | |
| <i>Distrib.</i> Arctic and Alpine regions, | | | |
| N. temp. zone. | | | |
| <i>Sp.</i> Blair Athol, Perthshire. | 1801 | J. Dalton | Rev. J. Dalton |
| Arncliffe Clouder, Yorks. | 1803 | „ | „ |
| Most abundantly upon Cronkley Fell, | | | |
| Yorks., Aug. 25 | 1824 | S. Hailstone | S. Hailstone |
| 389. Geum urbanum, Linn. | | | |
| <i>Avens. Copses, hedge-banks, &c., from</i> | | | |
| <i>Caithness southwards.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), N. Africa. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| 390. Geum intermedium, Ehrh. | | | |
| <i>Sp.</i> Knaresboro', Yorks. | 1798 | J. Dalton | Rev. J. Dalton |
| 391. Geum rivale, Linn. | | | |
| <i>Copses and moist places, Orkney to</i> | | | |
| <i>Devon.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), N. & W. Asia. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Malham Tarn, Yorks. | 1808 | S. Hailstone | S. Hailstone |
| Strensall Common, York | 1881 | H. J. Wilkinson | H. J. Wilkinson |
| 392. Fragaria vesca, Linn. | | | |
| <i>Wild Strawberry. Stony places, Shetland</i> | | | |
| <i>to Channel Islands.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), N. & W. Asia. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Castle Howard, Yorks. | 1881 | H. J. Wilkinson | H. J. Wilkinson |

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| 393. <i>Potentilla norvegica</i>, Linn. | | | |
| <i>Alien.</i> | | | |
| <i>Sp.</i> from bank of Leeds and Liverpool Canal, near Armley, Yorks. | 1893 | W. Kirkby | H. J. Wilkinson |
| <i>Potentilla fragariastrum</i>, Ehrh. | | | |
| <i>Woods and banks, Caithness to Channel Islands.</i> | | | |
| <i>Distrib.</i> Europe, N. Africa. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Strensall, York | 1881 | H. J. Wilkinson | H. J. Wilkinson |
| 394. <i>Potentilla verna</i>, Linn. | | | |
| <i>Rocky places (limestone, &c.), Forfar to Somerset.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), Siberia. | | | |
| <i>Sp.</i> Bury St. Edmunds, Suffolk | (1800) | Sir T. G. Cullum | Rev. J. Dalton |
| St. Vincent's Rocks, Bristol | 1796 | J. Dalton | „ |
| „ „ „ „ | 1884 | H. Fisher | H. J. Wilkinson |
| 395. <i>Potentilla salisburgensis</i>, Haenke. | | | |
| <i>Alpine districts, from Aberdeen to Wales.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), N. & W. Asia. | | | |
| <i>Sp.</i> Ben Lawers, Perth | 1808 | J. Dalton | Rev. J. Dalton |
| Gordale, Settle, Yorks. | 1810 | „ | „ |
| Near Loch Tay, Perth. | 1809 | W. Middleton | W. Middleton |
| Rocks by Malham Tarn, Yorks. | 1832 | S. Hailstone | S. Hailstone |
| 396. <i>Potentilla tormentilla</i>, Scop. | | | |
| <i>Heaths, dry pastures, &c., Shetland to Channel Islands.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), W. Siberia. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Strensall, nr. York | 1881 | H. J. Wilkinson | H. J. Wilkinson |

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| 397. <i>Potentilla procumbeus</i>, Sibth. | | | |
| <i>Sp.</i> Croft, N. Yorks. | 1830 | J. Dalton | Rev. J. Dalton |
| 398. <i>Potentilla reptans</i>, Linn. | | | |
| <i>Pastures and waysides, from Caithness southward.</i> | | | |
| <i>Distrib.</i> Europe, N. & W. Asia, Himalaya. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Brafferton, Yorks. | 1834 | Rev. W. Gray | H. J. Wilkinson |
| 399. <i>Potentilla anserina</i>, Linn. | | | |
| <i>Silver-weed. Roadsides, from Shetland to Channel Islands.</i> | | | |
| <i>Distrib.</i> Arctic and N. & S. temp. regions. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Brafferton, ,, | 1834 | Rev. W. Gray | H. J. Wilkinson |
| 400. <i>Potentilla rupestris</i>, Linn. | | | |
| <i>Rocks, Craig Breidden, Montgomery.</i> | | | |
| <i>Distrib.</i> Gothland southward, N. & W. Asia. | | | |
| <i>Sp.</i> Craig Breidden, Montgomeryshire ... | 1830 | Henslow | Rev. J. Dalton |
| ,, ,, ,, ... | 1866 | W. Whitwell | W. Whitwell |
| 401. <i>Potentilla argentea</i>, Linn. | | | |
| <i>Dry pastures and roadsides, Elgin southward.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), N. & W. Asia. | | | |
| <i>Sp.</i> Near Newark, Notts. | 1820 | W. Middleton | W. Middleton |
| Perthshire | (1840) | G. Munby | Giles Munby |

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| 402. <i>Potentilla fruticosa</i>, Linn. | | | |
| <i>Rocky banks by rivers, Yorks., Durham, Cumberland, Westmoreland, N. Clare, Galway.</i> | | | |
| <i>Distrib.</i> N. & Mid-Europe, Alps (Arctic), Himalaya. | | | |
| <i>Sp.</i> Banks of the Tees, High Force, | | | |
| Yorks. and Durham | 1807 | J. Dalton | Rev. J. Dalton |
| „ „ „ „ | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 403. <i>Potentilla comarum</i>, Nestl. | | | |
| <i>Bogs and marshes, Shetland to Channel Islands.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), N. Asia, &c. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Malham Tarn, Yorks. | 1807 | S. Hailstone | S. Hailstone |
| Skipwith Common, York | 1881 | H. J. Wilkinson | H. J. Wilkinson |
| Heslington, York | 1820 | W. Middleton | W. Middleton |
| 404. <i>Potentilla sibbaldia</i>, Hall f. | | | |
| <i>Scotch Alps, Shetland to Peebles.</i> | | | |
| <i>Distrib.</i> Alpine and Arctic Europe, N. Asia. | | | |
| <i>Sp.</i> Ben a Bourd, Aberdeens. | 1831 | R. K. Greville | Rev. J. Dalton |
| Ben Lawers, Perthshire. | 1808 | J. Dalton | „ |
| Ben Nevis, Inverness | 1810 | W. Middleton | W. Middleton |
| 405. <i>Alchemilla arvensis</i>, Lamk. | | | |
| <i>Waste places (sandy soil), Shetland to Channel Islands.</i> | | | |
| <i>Distrib.</i> Europe, N. Africa, W. Asia. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Heslington, York | 1802 | W. Middleton | W. Middleton |

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| 406. Alchemilla vulgaris, Linn. | | | |
| <i>Moist places, pastures, &c., Shetland southwards.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), N. & W. Asia. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Heslington, York | 1820 | W. Middleton | W. Middleton |
| 407. Alchemilla alpina, Linn. | | | |
| <i>Mountain streams and rocks, Shetland to York.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), N. & W. Asia. | | | |
| <i>Sp.</i> Ambleside, Westmoreland | 1809 | J. Dalton | Rev. J. Dalton |
| Borrowdale, Cumberland | 1804 | S. Hailstone | S. Hailstone |
| 408. Agrimonia eupatoria, Linn. | | | |
| <i>Hedge-banks and copses, from Sutherland southward.</i> | | | |
| <i>Distrib.</i> Europe, N. & S. Africa, &c. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Redcar, Yorks. | 1800 | S. Hailstone | S. Hailstone |
| 409. Poterium sanguisorba, Linn. | | | |
| <i>Dry pastures, Perth to Channel Islands.</i> | | | |
| <i>Distrib.</i> Europe, N. Africa, and N. & W. Asia. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Heslington, York | 1803 | W. Middleton | W. Middleton |
| 410. Poterium officinale, Hook f. | | | |
| <i>Meadows from Ayr to Channel Islands.</i> | | | |
| <i>Distrib.</i> Europe (Arctic), N. & W. Asia. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1791 | J. Dalton | Rev. J. Dalton |
| Heslington, York | 1803 | W. Middleton | W. Middleton |

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| 411. <i>Rosa spinosissima</i>, Linn. Scotch Rose. <i>Sandy sea shores, &c., from Caithness southward.</i> <i>Distrib.</i> Europe (Arctic), N. Africa, &c. | | | |
| <i>Sp.</i> Hartlepool, Durham | 1799 | S. Hailstone | S. Hailstone |
| Hackness, Scarboro' | 1850 | W. Bean | H. J. Wilkinson |
| Cambridge | 1786 | J. Dalton | Rev. J. Dalton |
| Bramham Moor, Yorks. | 1809 | S. Hailstone | S. Hailstone |
| The Burrows, Tenby, Pembrokes. ... | 1899 | H. M. Platnauer | H. M. Platnauer |
| 412. <i>Rosa involuta</i>, Sm. <i>Var. Smithii</i> , Baker. | | | |
| <i>Sp.</i> Holwick, Teesdale, Yorks. | 1820 | J. Dalton | Rev. J. Dalton |
| 413. <i>Rosa involuta</i>, Sm. <i>Var. Sabini</i> , Woods. | | | |
| <i>Sp.</i> Holwick, Teesdale, Yorks. | (1820) | J. Dalton | Rev. J. Dalton |
| Heaton Dene, Durham | (1820) | Winch | „ |
| 414. <i>Rosa involuta</i>, Sm. <i>Var. Doniana</i> , Woods. | | | |
| <i>Sp.</i> Henfield, Sussex | 1820 | W. Borrer | Rev. J. Dalton |
| High Force, Teesdale, Yorks. | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 415. <i>Rosa involuta</i>, Sm. <i>Var. Robertsoni</i> , Baker. | | | |
| <i>Sp.</i> Near High Force, Teesdale, Yorks.... | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 416. <i>Rosa hibernica</i>, Sm. | | | |
| <i>Sp.</i> Near Belfast, Ireland | (1810) | D. Turner | Rev. J. Dalton |
| 417. <i>Rosa mollis</i>, Sm. <i>Hedges, &c., Orkney southward.</i> <i>Distrib.</i> Europe (Arctic), W. Asia. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Near Cambridge | 1786 | „ | „ |
| Braemar, Aberdeens. | 1887 | H. Fisher | H. J. Wilkinson |
| Langwith, York | 1883 | H. J. Wilkinson | „ |

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| 418. Rosa tomentosa, Sm. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Langwith, York | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| Cambridge | 1786 | J. Dalton | Rev. J. Dalton |
| Acomb, York | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 419. Rosa tomentosa, Sm. | | | |
| <i>Var. subglobosa, Sm.</i> | | | |
| <i>Sp.</i> Holwick, Teesdale, Yorks. | 1830 | J. Dalton | Rev. J. Dalton |
| 420. Rosa tomentosa. | | | |
| <i>Var. scabriuscula, Sm.</i> | | | |
| <i>Sp.</i> Near Egton Bridge, N. E. Yorks. ... | 1830 | J. Dalton | Rev. J. Dalton |
| 421. Rosa rubiginosa, Linn. | | | |
| Sweetbriar. <i>Native.</i> | | | |
| <i>Sp.</i> On the Malton Road, five miles from York | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 422. Rosa micrantha, Sm. | | | |
| <i>Sp.</i> Near Egton Bridge, N. E. Yorks. ... | 1820 | W. Middleton | W. Middleton |
| 423. Rosa canina, Linn. | | | |
| Dog Rose. <i>Hedges, &c., Orkney to Channel Islands.</i> | | | |
| <i>Distrib.</i> Europe, N. Africa, &c. | | | |
| <i>Sp., Var. lutetiana, Leman,</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| 424. Var. surculosa, Woods. | | | |
| <i>Sp.</i> Croft, Yorks. | 1830 | J. Dalton | Rev. J. Dalton |
| 425. Var. dumalis, Bechst. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Langwith, Yorks. | 1883 | H. J. Wilkinson | H. J. Wilkinson |

Rosa canina.

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| 426. <i>f. verticillacantha</i> , Mérat. | | | |
| <i>Sp.</i> Between Sherburn and So. Milford, Yorks. | 1886 | H. J. Wilkinson | H. J. Wilkinson |
| 427. <i>Var. urbica</i> , Leman. | | | |
| <i>Sp.</i> Langwith, York | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 428. <i>Var. arvatica</i> , Baker. | | | |
| <i>Sp.</i> Skipwith, York | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 429. <i>Var. dumetorum</i> , Thuill. | | | |
| <i>Sp.</i> Langwith, York | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 430. <i>Var. obtusifolia</i> , Desv. | | | |
| <i>Sp.</i> Between Sherburn and So. Milford, Yorks. | 1886 | H. J. Wilkinson | H. J. Wilkinson |
| 431. <i>Var. tomentella</i> , Leman. | | | |
| <i>Sp.</i> Heslington, York | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 432. <i>Var. suberistata</i> , Baker. | | | |
| <i>Sp.</i> Langwith, York | 1885 | H. J. Wilkinson | H. J. Wilkinson |
| 433. <i>Var. Watsoni</i> , Baker. | | | |
| <i>Sp.</i> Skipwith, York | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 434. <i>Var. Bakeri</i> , Déségl. | | | |
| <i>Sp.</i> Langwith, York | 1883 | H. J. Wilkinson | H. J. Wilkinson |
| 435. Rosa stylosa (systyla Bast.) | | | |
| <i>Sp.</i> Hartwell, Sussex | (1820) | W. Borrer | Rev. J. Dalton |
| 436. Rosa arvensis, Huds. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |

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| 437. <i>Pyrus torminalis</i>, Ehrh. <i>Woods and hedges, Lancashire southward.</i> <i>Distrib.</i> Europe, W. Asia, N. Africa. | | | |
| <i>Sp.</i> Sussex | 1803 | W. Borrer | Rev. J. Dalton |
| 438. <i>Pyrus Aria</i>, Sm. White beam. <i>Copses, &c., Sutherland.</i> <i>Distrib.</i> Europe, N. Africa, N. & W. Asia. | | | |
| <i>Sp.</i> Leigh, Woods, Somerset | 1885 | H. Fisher | H. J. Wilkinson |
| Knaresboro', York (? <i>Pyrus rupicola</i> , Sym.) | 1798 | J. Dalton | Rev. J. Dalton |
| 439. <i>Pyrus aucuparia</i>, Ehrh. Rowan-tree, Mountain Ash. <i>Woods, &c.</i> <i>Caithness southward.</i> <i>Distrib.</i> Europe, N. & W. Asia, Himalaya, &c. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Heslington, York | 1803 | W. Middleton | W. Middleton |
| 440. <i>Pyrus communis</i>, Linn. Wild Pear. <i>Woods, &c., York southward.</i> <i>Distrib.</i> E. Europe, N. W. Asia. | | | |
| <i>Sp.</i> Curwen's Island, Windermere, West- moreland | 1808 | J. Dalton | Rev. J. Dalton |
| 441. <i>Pyrus malus</i>, Linn. Crab Apple. <i>Copses, &c., Perth south- ward.</i> <i>Distrib.</i> Europe, W. Asia, Himalaya. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Heslington, York | 1803 | W. Middleton | W. Middleton |

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| 442. <i>Cratægus oxyacantha</i> , Linn. | | | |
| Hawthorn. <i>Hedges, woods, &c., Shet-</i> <i>land southward.</i> | | | |
| <i>Distrib.</i> Europe, N. Africa, N. & W. Asia. | | | |
| <i>Sp.</i> Copgrove, Yorks. | 1790 | J. Dalton | Rev. J. Dalton |
| Heslington, York | 1803 | W. Middleton | W. Middleton |
| 443. <i>Cotoneaster vulgaris</i> , Lindl. | | | |
| <i>Limestone cliffs, Great Orme's Head.</i> | | | |
| <i>Distrib.</i> Europe, N. & W. Asia. | | | |
| <i>Sp.</i> Great Orme's Head, N. Wales ... | 1825 | W. Wilson | Rev. J. Dalton |

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